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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,453	03/08/2004	William F. Koch	BAC-003	2417

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EXAMINER

KIM, YOON YOUNG

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,453

Applicant(s)

KOCH, WILLIAM F.

Examiner

Yoon-Young Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/13/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mladota, U.S. Patent No. 4,025,434.

Regarding Claim 1, Mladota discloses a removable filter system comprising: a filter frame (#25) including one or more filter components; and a movement assembly including a drive mechanism (#34), a linkage (#35) coupled to the drive mechanism and attached to the filter frame, and means for the filter frame to move into and out of the duct (#21) upon actuation of the drive mechanism (#24).

Regarding Claim 2, Mladota discloses that the means for the filter frame to move into and out of the duct includes a first stationary rail and a second stationary rail (#24) affixable to the inside of the duct (#21) and slidably engageable with the filter frame.

Regarding Claim 3, Mladota discloses that the filter frame includes a first channel (#26) and a second channel (#27) forming a portion of its perimeter, wherein the first channel is designed to retain therein the first stationary rail and the second channel is designed to retain therein the second stationary rail.

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Regarding Claim 4, Mladota discloses that the filter frame includes a plurality of bays (#36, 37, 38, 39) and wherein each of the plurality of bays is arranged to retain therein one of the one or more filter components (#53).

Regarding Claim 14, Mladota discloses that the drive mechanism and linkage in combination is a hydraulic actuator (Col. 2, Lines 14-16).

3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Busse et al., U.S. Patent No. 3,826,374.

Regarding Claim 1, Busse discloses a removable filter system comprising: a filter frame (#6) including one or more filter components; and a movement assembly including a drive mechanism (#28), a linkage (#10) coupled to the drive mechanism and attached to the filter frame, and means for the filter frame to move into and out of the duct (#5) upon actuation of the drive mechanism (#4).

Regarding Claim 2, Busse discloses that the means for the filter frame to move into and out of the duct includes a first stationary rail and a second stationary rail (#4) affixable to the inside of the duct (#5) and slidably engageable with the filter frame.

Regarding Claim 3, Busse discloses that the filter frame includes a first channel and a second channel (#3) forming a portion of its perimeter, wherein the first channel is designed to retain therein the first stationary rail and the second channel is designed to retain therein the second stationary rail.

Regarding Claim 4, Busse discloses that the filter frame includes a plurality of bays (#2) and wherein each of the plurality of bays is arranged to retain therein one of the one or more filter components (#1).

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Regarding Claim 5, Busse discloses that the filter frame includes one or more lands (#7, 8) separating each of the plurality of bays (#2).

Regarding Claims 6-7, Busse discloses that the plurality of bays is hingedly connected together at the one or more lands (Fig. 1, 2).

Regarding Claim 8, Busse discloses that the plurality of bays is detachably connected together at the one or more lands (Col. 5, Lines 60-68).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busse as applied to Claim 2 above, and further in view of De Haan et al., U.S. Patent No. 5,567,327.

Regarding Claim 9, Busse does not disclose air jets. De Haan teaches a filter system comprising air jets (Col. 15, Lines 2-12). It would have been obvious to one of ordinary skill in the art to modify Busse with the element of De Haan in order to be able to discharge cake from the filter plates (Col. 3, Lines 40-53).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mladota as applied to Claim 1 above, and further in view of White, U.S. Patent No. 5,055,205.

Regarding Claim 10, Mladota does not disclose a guillotine damper gate drive mechanism. White discloses a filter system comprising a guillotine damper gate drive

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mechanism (Col. 4, Lines 22-29). It would have been obvious to modify Mladota with the element of White because it is a drive mechanism common in the filter art.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busse as applied to Claim 1 above, and further in view of Moller, U.S. Patent No. 5,192,434.

Regarding Claim 11, Busse does not disclose a spindle. Moller discloses a filter system comprising a spindle (Col. 7, Lines 24-29). It would have been obvious to modify Busse with the element of Moller because it is a drive mechanism common in the filter art.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mladota as applied to Claim 1 above, and further in view of Barnard, U.S. Patent No. 1,928,163.

Regarding Claim 12, Mladota does not disclose a rack and pinion or a worm gear mechanism. Barnard discloses a filter system comprising a rack and pinion or a worm gear mechanism (Page 2, Col. 1, Lines 19-22). It would have been obvious to modify Mladota with the element of Barnard because it is a drive mechanism common in the filter art.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Busse as applied to Claim 1 above, and further in view of Klepper, U.S. Patent No. 4,362,617.

Regarding Claim 13, Busse does not disclose a ball screw. Klepper discloses a filter system comprising a ball screw assembly and actuator (Col. 6, Lines 4-6). It would have been obvious to modify Busse with the element of Klepper because it is a drive mechanism common in the filter art.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yoon-Young Kim whose telephone number is (571) 272-2240. The examiner can normally be reached on 8:30-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YK
03/15/06


JOHN KIM
Primary PATENT EXAMINER